are a species of Diptera of the genus *Bibio* or *Cecidomya*, several species of *Tipulariæ*, large *Curculionites* allied to the *Otiorhynchus*, larvæ or nymphs of *Libellulæ*, *Blattæ*, *Ichneumonidæ*, *Formicidæ* and *Arachnida*. All these fossils belong to extinct species, but their genera, which still exist, do not occur in Europe.

"The diurnal lepidopterous insect belongs to one of those genera the species of which are not numerous, and are at present confined to the islands of the Indian Archipelago or the warmest countries of the Asiatic continent. According to M. Blum of Leyden, they hover around the palm-trees, on which perhaps they feed in the state of caterpillars. The individual which has been named *sepulta*, to recall its antediluvian origin, belongs to the genus *Cyllo*, and is allied to the *Rohria*, *Camnus*, and other neighbouring species; but it cannot be referred to any of those known at the present day.

"The outline and form of this insect are so well-preserved, that one might imagine it lithographed on a schist: only the right side is alone preserved, which is perfectly untouched, with a portion of the thorax and a slight impression of the abdomen. The upper wing is in great part hidden by the under one, and it is impossible to say whether it presents other delineations than an apical ocellus surmounted by a white point; the other, the whole surface of which is seen, is of a brownish gray colour, as in the allied species, with a white costal spot, a sinuated, median transverse band, of the same colour, followed by two black ocelli bordered in white, connected exteriorly with two white spots. The extremity of this same wing is rather paler, almost whitish, and divided, as in most of the living species, by two parallel brown marginal lines. The caudal appendix is rather longer than in the *Rohria*, but situated in the same manner. The preservation of the specimen admits of distinguishing the outline, and probably the true colour of the butterfly as it was before its incrustation."

I am not sufficiently acquainted with the species of exotic frogs to be able to compare them with the *Rana aquensis*, but I can assert that it differs entirely from those which exist in Europe. I await a favourable opportunity to allow me to describe and publish the fossil insects which for the last ten years I have collected in the gypsiferous beds of Aix; the number of the species I possess at the present time amounts to more than sixty.—*Bulletin de la Société Géologique de France*, April 21st, 1845.

On a curious appearance presented by the contents of the Capsules of a Moss from Chili, extracted from a Letter to the Rev. M. J. Berkeley, *by* Dr. Montagne.

"I was engaged in describing for the Cryptogamic flora of Chili a new genus allied to *Weissia*, and in consequence was desirous of ascertaining the form and structure of the spores in the species which I had before me. What was my surprise to find, instead of spores in every capsule which I opened, a kind of gemmæ analogous to those which occur in the cups of *Marchantia*! They have not indeed the

same form, but their structure is the same, or at least appeared to me to be so. They are wedge-shaped or parallelogrammic, about $\frac{7}{100}$ths of a millimetre in length, and from $\frac{4}{100}$ths to $\frac{6}{100}$ths in breadth. It is very difficult to ascertain their thickness, but I believe it to be about a third of their length. They are composed of at least two layers of two or three rows of broad cells on either surface, as visible under the microscope. Their colour is a deep green verging on bistre. I know of nothing at all similar in the family of Mosses, and at least in a physiological point of view, the fact is not unimportant. It must be observed that the capsules were quite ripe, having already lost their opercula, so that the question is not one of unripe spores. The species in which this curious structure was observed is *Eucamptodon perichætialis*, Mont."

Dr. Montagne kindly accompanied his observations with specimens, which has enabled me to confirm their correctness.—M. J. B.

M. Agassiz *on the Geological Development of Animal Life.*

The Zoophytes, Mollusca and Articulata existed in the earliest period of the earth's development, although all their classes were not numerously represented in the oldest members; but they do not allow of our supposing that any progressive perfection to the present creation occurred. This is the case with the Vertebrata only, among which fish appeared in the first period, reptiles in the second; mammalia and birds did not appear for a long time after the former; lastly came man, as lord of all: hence M. Agassiz denominates the corresponding periods, those of fish, reptiles and mammalia.

The greatest change in the fish occurred at the end of the Jura period. All fish which existed prior to the chalk have a peculiar aspect and belong in general to extinct families; those of the later epochs resemble those now living, and many of them belong to families and genera at present in existence; but they all differ specifically, just as *all* Vertebrata in different geological epochs differ in species.—*Jahrbuch für Mineralog. Geolog.* &c., Part 3. 1845.

Explorations of Dr. Schrenk.

The extreme limits of the wild and remote regions of south-eastern Siberia and along the Chinese frontier have been successfully explored by an able and enterprising botanist, Dr. Schrenk, who has recently returned to St. Petersburg. Remote and unfriended, this ardent naturalist has passed four years in a country, the greater part of which was never before trodden by an European foot. In addition to copious materials with which he will soon enrich botany, geology, and other branches of science, he has made most important observations on the eastern extension of the mass of land which forms a portion of that vast depressed area so vividly brought before our consideration by Humboldt, and which is now found to extend eastward from the shores of the Aral to the Saissar and Balkash lakes; though in approaching the latter region the ground rises to a few hundred feet above the sea. Thence penetrating to the lake of Issikul, surrounded by lofty mountains considerably south of the range of the